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04/18/24 • BIG FOOD › VIEWS

Artificially Sweetened Drinks Linked to Serious Heart Condition

Research published in the journal Circulation found a link between artificial and sugar-sweetened beverages and atrial fibrillation, or AFib, an abnormal heartbeat caused by the heart chambers beating out of sync with the lower chambers.

By Dr. Joseph Mercola

27

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Story at a glance:

- Research has found a link between artificial and sugar-sweetened beverages to atrial fibrillation (AFib), an abnormal and often rapid heartbeat that happens when the upper chambers of the heart beat out of sync with the lower chambers.
- The association was stronger between AFib and artificial sweeteners and lowest in those drinking pure fruit juice, although still higher than those who didn't drink any sweetened beverages.
- Artificial sweeteners cause DNA damage and interfere with normal activity in gut bacteria, making it difficult for beneficial bacteria to communicate, grow and reproduce. Destruction of healthy bacteria opens the door to increased growth of unfriendly microorganisms that cause health problems.
- Artificial sweeteners trick your body into storing fat, stimulate your appetite, increase cravings for carbohydrates and produce unique mechanisms of vascular impairment and alterations that lead to the progression of obesity and Type 2 diabetes.
- Sugar-sweetened beverages are associated with weight gain, obesity, Type 2 diabetes, heart disease, kidney diseases, tooth decay, cavities and gout, a type of arthritis. Aspartame, an artificial sweetener, is linked with anxiety-type behavior in aspartame-exposed animals and in up to two generations that descended from aspartame-exposed males.
- Try swapping your soda for clean water or Hibiscus tea. Pure water has zero calories and can be flavored with frozen fruit, lime or lemon. Hibiscus tea is a second option that is flavorful and adds a healthy boost to your diet.

Research published in the American Heart Association journal Circulation: Arrhythmia and Electrophysiology found an association between drinking sweetened beverages and atrial fibrillation.

Atrial fibrillation, also called AFib, is an abnormal and often rapid heartbeat that occurs when the upper chambers of the heart (atria) beat out of sync with the lower chambers (ventricles).

It's a common symptom in people with heart failure or heart disease and one of the most common arrhythmias (irregular heartbeats) that affects more than 2 million U.S. adults.

AFib can sometimes go away on its own, but it also can become more frequent with longer-lasting episodes that can lead to serious complications like stroke and heart failure.

The symptoms of AFib can look like other health problems, which is why it is crucial to understand the condition and receive the correct diagnosis.

For example, the declining ability to pump blood to the lungs and elsewhere in the body can lead to lightheadedness, dizziness and fatigue, which are symptoms that can be attributed to several other health conditions.

AFib may make you feel like your heart has skipped a beat or is fluttering or pounding.

Your risk increases with age, but lifestyle and dietary factors can also increase your risk, which is exactly what researchers found when they sought to determine if there was an association between drinking sweetened beverages and AFib.

"The Wuhan Cover-Up" by Robert F. Kennedy Jr.
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Diet and regular soda raises heart risk

The researchers acknowledged that a past association between sweetened beverages and cardiometabolic disease has been reported, but an association with atrial fibrillation was unclear.

The study enrolled 201,856 participants who did not have AFib at the time the study began, had completed a 24-hour diet questionnaire and had genetic data available.

Research has found a genetic component to AFib. Genome-wide studies identified 140 genetic loci that are linked to the development of AFib.

However, while genetic implications put an individual at higher risk of developing the condition, it is not a guarantee that the condition will develop.

There was a median follow-up of 9.9 years, during which 9,362 incidents of AFib were documented.

The researchers evaluated the consumption of sugar-sweetened beverages, or SSB, artificially sweetened beverages, or ASB, and pure fruit juice.

The data showed that people who drank greater than 2 liters per week of sugar-sweetened or artificially sweetened beverages increased their risk of AFib, with those who drank artificially sweetened beverages experiencing a higher risk.

The highest risk was observed in people who had a genetic risk and consumed more than 2 liters of artificially sweetened beverages, while the lowest risk was observed in those who had a low genetic risk and consumed less than 1 liter of pure juice per week.

The association between sweetened beverages and AFib persisted even after adjustments were made for genetic susceptibility to the heart condition.

"This study does not demonstrate that consumption of SSB and ASB alters AF [AFib] risk but rather that the consumption of SSB and ASB may predict AF risk beyond traditional risk factors," the researchers concluded.

Many people reach for an artificially sweetened beverage advertising zero calories and sugar because they know other sodas and juices contain an alarming amount of both.

Drinking a beverage advertised with zero calories and sugar can feel like you're making better choices but as these researchers have demonstrated, artificial sweeteners may cause more harm than good.

While the data from the current study demonstrates a higher risk of consuming ASB, a press release from the American Heart Association about the study also noted that people who drink 2 liters of SSB each week increase their risk of AFib by 10%.

Kris-Etherton, an emeritus professor of nutritional sciences at Penn State University, commented on the results of the study from China, saying:

> "This is the first study to report an association between no- and low-calorie sweeteners and also sugar-sweetened beverages and increased risk of atrial fibrillation.
>
> "While there is robust evidence about the adverse effects of sugar-sweetened beverages and cardiovascular disease risk, there is less evidence about adverse health consequences of artificial sweeteners.
>
> "In the meantime, water is the best choice, and, based on this study, no- and low-calorie sweetened beverages should be limited or avoided."

RFK Jr. and Brian Hooker's *New* Book: "Vax-Unvax"
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Sweeteners in diet soda can destroy your gut microbiome

While refined sugar feeds harmful, disease-causing bacteria in the gut, artificial sweeteners cause DNA damage and interfere with the normal activity of gut bacteria.

The artificial sweeteners reviewed in one study included aspartame, sucralose, saccharin, neotame, advantame and acesulfame potassium-k.

The animal study was published in the journal Molecules, and as noted by Business Insider, all the sweeteners "had a toxic, stressing effect, making it difficult for gut microbes to grow and reproduce."

According to the researchers, this effect can in turn affect your body's ability to process carbohydrates.

While, overall, all six artificial sweeteners were found to have toxic effects on gut bacteria, there were individual differences in the type and amount of damage they produced.

- Saccharin caused the greatest, most widespread damage, exhibiting both cytotoxic and genotoxic effects, meaning it is toxic to cells and damages genetic information in the cell (which can cause mutations).
- Neotame was found to cause metabolic disruption in mice and raised concentrations of several fatty acids, lipids and cholesterol. Several gut genes were also decreased by this sweetener.
- Aspartame and acesulfame potassium-k — The latter of which is commonly found in sports supplements — were both found to cause DNA damage.

In a carefully crafted message, Ariel Kushmaro, Ph.D., professor of microbial biotechnology at Ben-Gurion University and lead author, told Business Insider:

> "We are not claiming that it's toxic to human beings. We're claiming that it might be toxic to the gut bacteria, and by that, will influence us."

These data support previous research published in 2013, which concluded that sucralose reduces the number, and alters the composition of, gut bacteria.

Animal research in 2008 showed sucralose could kill gut bacteria and appeared to target beneficial microorganisms to a greater extent than pathologic bacteria.

This is crucial since anytime you destroy healthy intestinal bacteria, it opens the door to increased growth of unfriendly microorganisms that can cause health problems.

A 2021 study found three of the six commonly used artificial sweeteners impair your gut bacteria's ability to communicate and the "effect of these artificial sweeteners on numerous molecular events that are at the core of intestinal microbial function, and by extension on the host metabolism."

Artificial sweetener tricks your body into storing fat

Since the 1960s, researchers have known that your body metabolizes different types of carbohydrates in different ways, which causes hormonal and physiological responses that influence fat accumulation and metabolism.

While the sugar industry wants you to believe that all calories are the same, you can't undo the effects of soda by cutting back on calories in your diet since refined sugar itself wreaks havoc on your gut microbiome and your metabolism.

In late 2021, research showed women who consumed foods with artificial sweeteners felt hungrier and ate more food than those who simply drank an SSB.

Contrary to industry claims, research shows that artificial sweeteners stimulate your appetite, increase cravings for carbohydrates and produce a variety of metabolic dysfunctions that promote fat storage and weight gain.

For a list of research supporting dysfunction in fat storage and weight gain associated with consuming artificial sweeteners see "Reconfirmed: Artificial Sweeteners Make You Sick."

There is also a mounting number of studies that have shown artificial sweeteners raise your risk of obesity and Type 2 diabetes, perhaps to an even greater degree than sugar.

One animal study presented at the annual Experimental Biology conference in San Diego confirmed these results while exploring how different sweeteners affect the way food is used and stored, including the effect on vascular function.

The researchers concluded:

> "Overall, results of this study suggest that exposure to high glucose and artificial sweetener administration lead to unique mechanisms of vascular impairment and homeostatic alterations that may be important during the onset and progression of diabetes and obesity."

Diet soda linked to depression, gout and more

A damaged gut microbiome, fat storage and an increased risk of obesity may help explain how diet soda is linked to so many health conditions.

A 2024 study showed that SSBs and ASBs increase your risk of cardiovascular disease as an adult regardless of your activity level.

The study evaluated 13,269 cardiovascular disease events and compared the results to those who never or rarely consume sweetened beverages against those who consumed two or more each day.

They found a dose-dependent response, concluding:

> "Higher SSB intake was associated with CVD risk regardless of physical activity levels. These results support current recommendations to limit the intake of SSBs even for physically active individuals."

Data have also linked sugar and artificially sweetened beverages with an increased risk of depression.

Research showed that drinking four servings of soda a day increased the risk of depression by 30% compared to those who did not drink sweetened beverages of any kind.

People who drank primarily diet soda had a 31% increased risk of suffering depression, regular soda was associated with a 22% increased risk and those who drank diet fruit drinks had a 51% higher risk of depression.

Regular fruit drinks were associated with a more modest 8% increased risk.

For a discussion of the potential pathways sugar impacts mental health, see "How Dietary Intervention Lifts Depression."

Soda and other SSBs are a leading source of added sugar, with 6 in 10 youths and 5 in 10 adults drinking at least one beverage on any given day.

Even the Centers for Disease Control and Prevention (CDC) states:

> "Frequently drinking sugar-sweetened beverages is associated with weight gain/obesity, Type 2 diabetes, heart disease, kidney diseases, nonalcoholic liver disease, tooth decay and cavities and gout, a type of arthritis."

However, the CDC only suggests that "limiting the amount of SSB intake can help individuals maintain a healthy weight and have a healthy diet," stopping far short of advising Americans to ditch these unhealthy drinks to avoid chronic disease.

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Aspartame has been linked to many health problems

Aspartame is another powerful artificial sweetener that has been linked to a significant number of health conditions.

A 2022 animal study found that at doses equivalent to 15% below the FDA-recommended maximum daily intake for humans, aspartame produced anxiety-type behavior and changes in genetic expression in areas of the brain that regulate anxiety and fear.

These changes in the amygdala occurred in the aspartame-exposed animals and in up to two generations that descended from aspartame-exposed males.

The artificial sweetener is found in a long list of processed foods and beverages. In 2023, the World Health Organization's International Research Agency on Cancer announced that aspartame is a possible carcinogen.

Try swapping your soda for clean water or hibiscus tea

If you're drinking artificially sweetened, zero-calorie beverages it's important to understand that they do not help if you're overweight or have insulin resistance. Instead, they probably will make matters worse.

I firmly believe ditching soda and other sweetened beverages is one of the most important steps you can take to improve your weight and your overall health.

Remember, pure water is zero calories, and you can easily add flavor by squeezing in fresh lemon or lime or a piece of frozen fruit. If you're looking for something that's more than water, consider swapping it for tea instead.

Drinking tea is flavorful and adds a healthy boost to your diet. Hibiscus tea has a pleasantly sharp flavor that's like the tartness of cranberries and you can find it in liquid extract form, which allows you to add it to your glass of water.

Hibiscus tea is rich in polyphenols and has other health benefits including protecting your liver and preventing metabolic syndrome.

Originally published by Mercola.

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the views of Children's Health Defense.

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Dr. Joseph Mercola
Dr. Joseph Mercola is the founder of Mercola.com.

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BChristine
6 days ago
AFib is only the tip of the iceberg when it comes to damage these artificial sweeteners do to the body.
4 0 Reply

fromaway46 → BChristine
4 days ago
The article accuses sugar as well
0 1 Reply

felix1999
6 days ago
That makes sense. **Sucralose** made me anxious so I ditched it.

What about **stevia, xylitol, or monk fruit**? I have read that xylitol doesn't spike blood sugar or insulin, starves the plaque-producing bacteria in your mouth and feeds friendly microbes in your digestive system.
2 0 Reply

BChristine → felix1999
5 days ago edited
You are correct about Xylitol; this is what I've read too. Another healthy option for sweetener is **GLYCINE Powder** ... not many people know about this. It is an amino acid with many benefits!
2 0 Reply

felix1999 → BChristine
5 days ago
I saw someone else mention that to elsewhere. I have to look into that.
Thanks for bringing that up.
Does it taste sweet?

Thank you for responding.
1 0 Reply

BChristine → felix1999
5 days ago
Absolutely! It's a bit finer than 'processed white sugar', but very sweet. It has WAY more benefits than any stevia product (which I never use for various reasons). I mix it in water, tea or anything I'd like a little sweetener in. I would not advise using more than a couple tablespoons per day; although many people do.

This is the brand I use: https://www.iherb.com/pr/no...
2 0 Reply

felix1999 → BChristine
5 days ago edited
Thank you, thank you, thank you!
I am compiling my supplement list for reordering and that is definitely going on it. Thank you for the brand recommendation too. That helps a lot.

I will purchase some and try it use it with my ginger, tumeric, ceylon cinnamon and when done steeping is when I add my fresh lemon juice, pure vanilla and sweetner. It tastes just like Ziegler apple cider.

(I use the ginger and tumeric roots, peeled finely chopped and a stick of ceylon cinnamon)

P.S. I use a lot of NOW brand supplements too! I am eager to try it.
2 0 Reply

BChristine → felix1999
3 days ago
Your concoction sounds awesome and very healthy ~ glad I could help!
2 0 Reply

felix1999 → BChristine
11 hours ago
I am tired of dealing with cancer.
These ingredients have been praised so as long as it tastes good, I drink it every day.
0 0 Reply

Sandburners → BChristine
3 days ago
When researchig how to cleanse myself of metallic dye after an MRI with contrast, I read that glycine is great for flushing toxic such as the dye from our bodies.
1 0 Reply

BChristine → Sandburners
2 days ago
Thank you! This is good to know, as I have had reactions to Contrast Dye in the past ... hopefully since I've been using Chlorella, Glycine and Silymarin/Dandelion for years, the toxins from those procedures has diminished.
0 0 Reply

Jennifo → felix1999
5 days ago
I love stevia drinks! There is a brand Zevia that has a great taste (it's sweet but doesn't leave an aftertaste) & is clear for every flavor so no artificial colors. It was my dessert when I was cutting sugar in my diet to fix some bad gut bacteria for a month detox.

One sip of diet drinks give me a shooting stabbing pain to my eyes & brain. I do notice that those that I know who drink diet soda say that they are 'addicted' to them & are a bit fluffy. It makes sense that these chemicals trick the body into storing fat.
2 0 Reply

Sandburners → Jennifo
3 days ago
My husband is a nervous Nellie. He drinks several diet sodas per day. I've been telling him what I'm reading here. Sure hope I can get through to him.
1 0 Reply

felix1999 → Jennifo
5 days ago
Thank you! I had not heard of Zevia before.
I will look into that too!
0 0 Reply

Sandburners → felix1999
3 days ago
I've tried it but don't care for the taste much. The lemon lime is best. Didn't care at all for the grapefruit flavor. I'd just as soon drink water, but that's how I feel about all other diet soda.
1 0 Reply

felix1999 → Sandburners
11 hours ago
Thank you again!
0 0 Reply

Sandburners → felix1999
3 days ago
It seems stevia isn't necessarily harmful, but if it's mixed with erithritol, that's another story. erithritol has been found to cause blood clots.
1 0 Reply

felix1999 → Sandburners
11 hours ago
Thank you for the information! Here I thought erithritol was okay. You are right. They are usually together. I am going with Glycine as a sweetner and it is an amino acid too!!

I avoid sugar! Cancer loves sugar!. Right now I am on Herceptin, every three weeks (breast cancer) ,and that can cause heart problems. Heart problems run in both sides of my family. So I have heart check ups till I am done with it.

I have refused to the hormone therapy for **five years!** I am triple positive. I will stay with a clean diet and exercise, mostly walking and in the summer swimming and some horseback riding. My cousin has horses - just love em! I wish I had my own.
0 0 Reply

MarianneOfTheConstitutionalRep
6 days ago
So let me get this straight. All these years we've asked for info on artificial sweeteners and health effects and now it's related to A fib? How convenient considering the last three and a half years.
2 0 Reply

Jennifo → MarianneOfTheConstitutionalRep
5 days ago
Yeah, it's never the convid shots is it?!!
2 0 Reply

Sandburners → Jennifo
3 days ago
It may be that the combination of artificial sweeteners and the covid shots is even more harmful than the shots alone.
1 0 Reply

fromaway46
4 days ago
Why pick on just "artificial and sugar-sweetened beverages" ? Aren"t there many other artificial and sugar-sweetened items mde for human consumption ?
2 1 Reply

Marie blaszak
5 days ago
Is this for Stevia too? Cuz I use it every day in my tea. I use a fair amount.
1 0 Reply

Gerald Landry
2 days ago
I'll attest to the damage caused by the Formaldehyde component of Aspartame! We (a thousand Tradesmen) were eXposed to 500TPDay of ToXic Methanol in Pulp Mill Emissions building a New Recovery Boiler next to the operating Pulp Mill! It was a complex eXposure, but having burning throat mouth and tongue my last (August 2003) day was confirmed to be the biggest complaint of people suffering from Aspartame Disease!
I gained 50Lbs in 6 months, craving Carbs and would literally eat 2 supper meals! The 2nd meal @ a Restaurant when out for a walk! I also had Atrial fibrillation, quite a scary misfiring

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of the heart! There was Chemically Induced Neuropathy, with burning sensation of the feet on the Project and after until June 2004, when I was Layed off on a Nox SCR Scrubber Project @ Nanticoke on the North Shore of Lake Erie, and left Southern Ontario, sleeping on the North Shore of Georgian Bay @ Blind River, I woke up without the Burning feet! Again the following morning, sleeping @ Wawa there was No Neuropathy also caused by Air Pollution! I had purchased a Canadian Geographic Magazine that Winter but never read it! There was an Article explaining that the Industrial Emissions from the Ohio Indiana Rust Belt would blow Northwards over Detroit they veer East along the North Shore of Lake Erie where I had been living in Port Dover and over the Nanticoke Industrial Park, towards Hamilton, Toronto and veering towards Ottawa. September of 2004 I got Gassed again and got involved with Injured Worker's Support Group's, and the Canadian Pain Coalition partnered in with Ciwa,

see more

0 0 Reply

Ken Swiatek

3 days ago

There should also be a discussion between high fructose corn syrup and cane sugar. HFCS uses a 55% or higher ratio of fructose versus 50% that has to be digested by our liver.

0 0 Reply

CastleConnell

6 days ago

What if you hate drinking water, and no attraction to Hibiscus tea either. I can only drink kombucha or coconut beverages.

0 0 Reply

Jennifo → CastleConnell

5 days ago

Coconut is a good choice but watch kombucha for the acidity & sugar content. You may develop more cavities from the sugar.

Have you tried lemon or lime slices or a drop or two of stevia (REAL stevia not truvia)? Key is to integrate it into your day. It truly can be life changing because your body needs good, clean water to function at it's best.

1 0 Reply

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